

# The Role Of Institutional Support In Sustainable Development Competencies Among Academic Faculty At Higher Educational Institutions

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## ABSTRACT

This research study investigated the role academic institutions can play for developing sustainable development competencies among academic faculty within higher education institutions. The study employed quantitative method research design and unproportioned random sampling technique due to fewer female academic faculty members than male academics. While most participants rated institutional facilities as moderate, notable disparities in satisfaction emerged. Recognition and awards for teaching and performance achieved the highest mean score, suggesting a sense of acknowledgment among faculty; Financial and travel grants for research and professional development programs received moderate satisfaction ratings, Demand for institutional initiatives, particularly workshops, training, and faculty development grants, underscored a strong interest in continuous professional growth. Participants also emphasized the need for community engagement initiatives and faculty learning communities, though responses here were more varied, indicating differing expectations. These findings stress the necessity for institutions to reassess their strategic goals and increase investments in professional development, community involvement, and interdisciplinary collaboration to support academic excellence. It is recommended that administration at the institutions should initiate a comprehensive developmental program focusing on policy literacy, experiential learning, interdisciplinary collaboration, and enhancing access to resources, streamlining administrative tasks, and fostering stronger community and global partnerships to support academics in developing their sustainable competencies to perform better for the sustainability of the society.

**Keywords:** Academic Faculty, Academic Institutions, Sustainable Development Competencies, Institutional Support, Sustainability

## INTRODUCTION

The engagement of academic faculty members in sustainability practices at higher education institutions increases the process of change at the institutional level and improves institutional relationships with society. Due to their valuable efforts for the sustainability of their institution and society, these academic faculties often receive very little support and rewards. Additionally, many expectations are kept from these academic faculties to play their role for the advancement of their fields through various means such as making innovations, publishing research articles, showing professionalism in teaching (Gul, R., et al., 2023; Gul, R., & Khilji, G. K. 2022; Tahir, T. et al., 2023; Khan, H. 2023), promoting creativity and critical thinking (Zhou et al., 2022), attaining funding for research, and performing as visionary leaders for the sustainability of their disciplines. However, due to lack of support and mentoring (Ahmad, Gul, & Kashif, 2022; Gul & Khilji, 2023; Salameh et al., 2022), these academic faculties are observed to lack most of these sustainable competencies (Zvavahera, 2021). This may be among the various factors preventing majority of academics from occupying prominent leadership roles at higher education institutions. Therefore, this research study aims to investigate the role of institutional support in fostering sustainable competencies among academic faculty.

Multiple studies have been carried out on sustainable development (Barber et al., 2014; Kolb et al., 2017; Sassen and Azizi, 2018; Anstadt, 2009; Escobar-Tello and Bharna, 2013; Batool et al., 2021; Gul et al., 2023; Muhammad Tufail et al., 2022; Salameh et al., 2022). A study by Brown et al., (2023) investigated academic faculty's perceptions about institutional support provided for sustainability initiatives. The study identified that through the formulation of supportive policies and provision of relevant resources, academic faculties can materialize the sustainability through their initiatives. The study also declared that academic faculties requested for different facilities from the institution, such as enough funding (Bukhari et al., 2021; Gul & Khilji, 2021; Gul, Tahir, et al., 2021), programs that provide opportunities for professional growth (Ayub, Gul, Malik, et al., 2021; Saleem et al., 2021), workshops and encouragement from the institution for their sustainability initiatives. The study also identified that academic faculty struggle to play their role in sustainability initiatives due to unclear policies and lack of encouragement (Gul, Tahir, et al., 2020; Gul, Zakir, et al., 2021; Said et al., 2021). The study suggested that the leadership of the institution should play their role to promote the culture of sustainability in higher educational institution (Ahmad, Gul, &

Imtiaz, 2022; Ali et al.,2021; Batool et al.,2022; Gul, Khan, et al.,2020). A study conducted by Johnson and Martinez (2022), to examine the commitments of higher institutions for sustainability initiative. The study devised a framework for helping academic faculty in their sustainability initiative for the community. The study identified encouraging and supportive policies, proper resource allocation, and campus culture as important factors that could improve the sustainability programs of the institutions. Johnson and Brown, (2023) investigated the role of interdisciplinary cooperation in fostering sustainability education. The study highlighted that interdisciplinary collaboration among different fields of studies can have a substantial effect over sustainability education (Ayub, Gul, Ali, et al.,2021; Gul, Tahir, et al.,2021). The study also concluded that interdisciplinary cooperation among different disciplines can help academic employees in developing suitable instructional strategies in order to teach sustainability. A study by Wang and Smith, (2022) surveyed students' participation and their contributions to sustainability-related projects and activities. The study highlighted that sustainability clubs and projects are helpful in fostering sustainability initiatives through practical learning and group problem-solving activities (Ahmad & Gul, 2021; Gul, Ayub, et al.,2021; Gul, Muhammad, et al.,2021). Lee et al. (2022) carried out a study in which they explored faculty training programs for sustainability education. The study discovered that provision of online courses, the arrangement of training workshops, and seminars can help in sustainability education. A research study by (Ahmad, Gul, & Zeb, 2022; Gul et al.,2022; Gul, Ayub, et al., 2021) surveyed barriers that might hinder curricula innovation for sustainability education. The study discovered that efforts to update curricula were hampered by a lack of administrative support, resistance to change, and a lack of clear policies and guidelines. Martinez and Brown, (2022) carried out a research study on exploring institutional support and opportunities for sustainability efforts. The study highlighted that inter-disciplinary cooperation, allocation of proper resources and clear policies are very important for sustainability efforts. Chang and Garcia (2022) investigate the prevalent policies and establish practices related to sustainability education (Ayub, Gul, Malik, et al.,2021; Batool et al.,2022; Gul, Ayub, et al.,2021). The study concludes that resource constraints, lack of institutional commitment, and curriculum integration prevent academic faculties to play their role for sustainability education. Although the current literature contains research studies on sustainability initiatives, there is a lack of research studies specifically focusing on the role academic institutions can play to help academic faculty develop their sustainable competencies. This research study tries to study to what extent does institutional support contribute to foster the sustainable development competencies among academic faculty in the institution.

## Methods and Materials

### Research Design

This study utilizes a quantitative research design to systematically measure and analyze numerical data relevant to the research objectives. By employing this design, the study aims to establish patterns, relationships, and causal links within the collected data. Quantitative method also allow for a high degree of control over variables, which enhances the ability to validate results and minimize biases, thereby ensuring a rigorous approach to understanding the research questions.

### Sampling and Population of the Study

This research study has used unproportioned random sampling technique because there were fewer female academic faculty members than male academics in both varsities. The sample of the study was consisted of 23 male academic faculty members and 23 female faculty members from the University of Malakand, as well as 17 male academic faculty members and 17 female academic faculty members from the University of Swat. The sampling technique has prioritized taking female academics total population as a sample due to their lower numbers, while an equal number of male faculty members has taken unproportioned.

### Instrumentation

As per the nature and requirements of the study, the researcher has employed questionnaires as data collection tools. For data collection, the major question was assessed by preparing sub questions in the same theme. These sub questions are given below.

### Data Collection Tools

For the data collection, the researcher distributed questionnaires as well as interviews of each participant of the study. The questionnaires contained sixteen SDCs for question one as well as nine facilities and thirteen initiatives for question of study. Before data collection, the consent of the participants was taken.

### Data Analysis

As per the nature of the research questions, quantitative data were collected from the participants, so the quantitative data were analyzed through descriptive statistics Percentage, Frequency, Mean, SD) and inferential statics t-test) using SPSS ver. 26.

### Demographic Information of the Participants.

S. No	Frequency	Percent
Male	40	50.0
Female	40	50.0
Total	80	100.0

According to the sample research study, a total of 80 academics took part in providing data in data collection process from the University of Malakand and the University of Swat from Malakand region. From the participants, the frequency of the

male participant was 40 which makes 50 percent of the total participants, and the frequency of female participants was also 40 which also makes 50 percent of the total participants.

**Research Question:** To what extent does institutional support contribute to fostering the sustainable development competencies among academic faculty in the institution?

**Table 2. Descriptive Statistics of the Facilities Provided by the Institutions**

S.no	Statements of the facilities	N	Minimum	Maximum	Mean	Std. Deviation
1	Training and Professional Development Programs	80	1.00	21.00	1.75	2.24
2	Provision of required resources	80	1.00	2.00	1.50	0.50
3	Curriculum Support	80	1.00	2.00	1.13	0.33
4	Collaborative Opportunities With other departments and universities	80	1.00	2.00	1.56	0.50
5	Research Support in terms of finance and travel grant	80	1.00	2.00	1.70	0.46
6	Community Engagement and Outreach services	80	1.00	2.00	1.66	0.48
7	Provision and access to technological resources	80	1.00	2.00	1.54	0.50
8	Evaluation and Feedback Mechanisms availability	80	1.00	2.00	1.40	0.49
9	Recognition and Awards for teaching and other performances	80	1.00	22.00	1.80	2.34

**Table-3** shows that the participants' opinion for the facility of Training and Professional Development Programs was with M: 1.75 AND SD; 2.24. Similarly, for the facility of Provision of required resources, the Mean was 1.50 with an SD: 0.50. Furthermore, participants expressed Curriculum Support from the institution for them with M: 1.13 and SD: 0.33. Moreover, participants declared institutional Collaborative Opportunities with other departments and universities with M: 1.56 and SD: 0.50. Likewise, participants' estimation for Research Support in terms of finance and travel grant from the institution was with M: 1.70 and SD: 0.46. Moreover, participants declared Community Engagement and Outreach services from the institution with M: 1.66 and SD: 0.48. Moreover, participants estimated institutional Provision and access to technological resources with M: 1.54 and SD: 0.50. Similarly, they stated Evaluation and Feedback Mechanisms availability with M: 1.40 and SD: 0.49. Likewise, participants declared institutional Recognition and Awards for teaching and other performances with M: 1.80 and SD: 2.34.

**Table 4. Descriptive statistics of the Initiatives Taken by Institutions**

S.no	Statements of the initiatives	N	Minimum	Maximum	Mean	Std. Deviation
1	Workshops and Training Programs	80	1.00	2.00	1.05	0.22
2	Faculty Development Grants for higher studies and trainings	80	1.00	2.00	1.09	0.28
3	Interdisciplinary Collaboration	80	1.00	2.00	1.13	0.33
4	Sustainability Fellowships to deepen understanding and contribute to efforts aimed at addressing global sustainability challenges.	80	1.00	2.00	1.10	0.30
5	Engagement in Curriculum Development	80	1.00	11.00	1.18	1.13
6	Organizing Guest Lectures and Seminars	80	1.00	2.00	1.09	0.28
7	Establishing Faculty Learning Communities	79	1.00	11.00	1.19	1.14
8	Clear Institutional Policies and Guidelines	80	1.00	2.00	1.06	0.24
9	Community Engagement Initiatives	80	1.00	11.00	1.25	1.15
10	Availability of Online Resources and Toolkits	80	1.00	11.00	1.16	1.13
11	Faculty performance Assessment and Evaluation to evaluate the effectiveness and impact of educators and researchers in advancing sustainable development goals within academic institutions.	80	1.00	2.00	1.03	0.16
12	Professional Development Opportunities	80	1.00	11.00	1.21	1.14
13	Partnerships with External Organizations	80	1.00	2.00	1.13	0.33
	Valid N list wise)	79				

**Table-4** shows that participants' demanded Workshops and Training Programs from the institution with the M: 1.05 and SD: 0.22. Similarly, they wanted Faculty Development Grants for higher studies and training with M: 1.09 and SD: 0.28. Furthermore, the participants urged for Interdisciplinary Collaboration with the M: 1.13 and SD: 0.33. Moreover, they admitted Sustainability Fellowships to deepen understanding and contribute to efforts aimed at addressing global sustainability challenges with M: 1.10 and SD: 0.30. Likewise, they needed Engagement in Curriculum Development with M: 1.18 and SD: 1.13. Moreover, they demanded the institution for Organizing Guest Lectures and Seminars with M: 1.09 and SD: 0.28. Moreover, they required Establishing Faculty Learning Communities from the institution with M: 1.19 and SD: 1.14. Similarly, they required Clear Institutional Policies and Guidelines with M: 1.06 and SD: 0.24. Furthermore, the participants felt Community Engagement Initiatives important with M: 1.25 and SD: 1.15. Moreover, they demanded the Availability of Online

Resources and Toolkits with M: 1.16 and SD: 1.13. Furthermore, they wanted Faculty performance Assessment and Evaluation to evaluate the effectiveness and impact of educators and researchers in advancing sustainable development goals within academic institutions with M: 1.03 and SD: 0.16. Moreover, they demanded Professional Development Opportunities with M: 1.21 and SD: 1.14. Similarly, they consider it important for the institution to make Partnerships with External Organizations with M: 1.13 and SD: 0.33.

Some of the respondents commented that prioritization issues further compound the challenges, as budget allocation often neglects essential educational needs. Some argued that overcrowded classrooms limit practical teaching activities, hindering students' ability to grasp concepts through hands-on learning. Moreover, some respondents complained that slow internet access and networking delays impede information sharing. Few respondents disclosed their worries about insufficient support for adjunct lecturers, including inadequate pay and job security, which negatively impacts their focus and effectiveness in teaching. Some of the respondents argued that the absence of training in bioinformatics and advanced instrument usage leads to low-quality research outputs.

**Discussion and Conclusion:** This study also identified barriers that prevent academic faculty members from developing sustainable competencies. These consist of institutional policies that are restrictive, training programs that are insufficient, a lack of interdisciplinary collaboration, resistance to change, and restricted access to current data (Kotter, 1996; Klein, 2010. Research conducted by Klein 2010 and Kotter 1996 support these conclusions by pointing out related issues like ineffective interdisciplinary communication and strict administrative processes. Another research, though, presents a different viewpoint. For example, Mento et al. 2002 and Frost and Jean 2003, demonstrated how certain institutions foster change by offering both financial support and decision-making autonomy, and how efficient communication networks can improve interdisciplinary collaboration (Gul, Kanwal, et al., 2020; Gul & Rafique, 2017; Khan et al., 2023; Mento, Jones, & Dirndorfer, 2002; Frost & Jean, 2003). Similarly, Teichler 2007 underlined how open policies foster academic excellence, and Guskey 2002 stressed the significance of organized faculty development programs (Guskey, 2002; Teichler, 2007). As Altbach and Salmi 2011 found, certain institutions are able to succeed in spite of their limited resources by employing creative approaches (Altbach & Salmi, 2011).

This study also identified academics' perceptions of facilities and initiatives offered to them by their institutions. Although most participants gave the facilities a moderate rating, there were some noticeable differences in satisfaction. For example, the category with the highest mean score was recognition and awards for teaching and performance, suggesting that participants felt somewhat acknowledged in this regard. However, curriculum support is the lowest, indicating a substantial lack of institutional support for activities related to the curriculum. Likewise, responses regarding financial and travel grants for research support and training and professional development programs showed a moderate level of satisfaction; however, the higher standard deviations suggest that individual experiences vary. However, the participants' requests for institutional initiatives. Initiatives like workshops, training programs, and faculty development grants for further education and training were the most in demand. These results highlight the importance of ongoing opportunities for professional development, which participants felt as essential for their academic progress. Participants also stated that "Community Engagement Initiatives and Establishing Faculty Learning Communities" were necessary, but the responses to these initiatives were more inconsistent, indicating a wider range of expectations in this area. Overall, the data shows that even though institutions offer some programs and facilities, there is a need for better assistance, especially regarding community involvement, interdisciplinary collaboration, and professional development. This shows that educational institutions should reevaluate their goals and make greater investments in fields that directly support the growth of academic excellence and sustainable competencies among academic faculty members. Furthermore, Participants' strong request for interdisciplinary collaboration and professional development initiatives indicates the importance of the role an academic institution could play for developing the competencies of their academic faculty members. In addition, participants' request for various initiatives indicate that, to create an academic environment that is more supportive, it is imperative to address the gaps in the curriculum, improve recognition and awards programs, and evaluate and provide feedback.

This study also emphasizes the need for more research and focused interventions to support academic faculty's development and enhance institutional resources. By attending to these needs, educational institutions can better prepare their academic faculties to handle the changing demands and challenges faced by HEIs in Pakistan. Comprehending the intricate dynamics of competency perceptions and gender disparities within academia not only enhances our knowledge of educational practices but also directs the creation of strategic interventions meant to improve research, teaching, and institutional support systems.

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